

the sheet 1 is preferably 1.2-5 times, and an expansion ratio of the sheet 2 is preferably 1.01-1.1 times.” (Abstract, page 1). JP ‘816 is silent, however, as to the flexural modulus of the particular resins used to form the finely foamed sheet 2 and the finely foamed sheet 1. Thus, while JP ‘816 discloses that the two foamed sheets 1 and 2 bonded together have different expansion ratios, the JP reference does not disclose that the two sheets are formed from “two polypropylene resins having different flexural modulus” as recited in claim 1.

In addition, JP ‘816 does not teach a “substantially unfoamed layer [] positioned between the two foam polypropylene layers” as recited in claim 4. Instead, JP ‘816 discloses a nonfoamed sheet 3 adhered to foamed sheet 1 on the surface opposite that to which foamed sheet 2 is adhered. (Abstract, page 1; also, drawing figure C.)

Accordingly, JP ‘816 does not anticipate claims 1 or 4, nor the claims that depend therefrom.

Claim Rejections – 35 USC §102 or §103

Claims 1-6 and 8-11 stand rejected under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 USC §103(a) as obvious over GB 2 263 435 (“GB ‘435”).

GB ‘435 discloses a plastics laminate containing one or more inner layers of foamed polypropylene. (Abstract, page 1.) However, like the disclosure in JP ‘816 discussed above, GB ‘435 does not disclose that the polypropylene layers are formed from “two polypropylene resins having different flexural modulus” as recited in claim 1. In fact, the Example described at pages 5-6 of GB ‘435 makes clear that the two polypropylene resins used in the foamed layers are the same.

Accordingly, GB ‘435 clearly does not anticipate claims 1-11. Moreover, GB ‘435 lacks any teaching or suggestion that would have

motivated one having ordinary skill in the art of making foam sheets to employ two different polypropylene resins having different flexural modulus. There is simply no mention in GB '435 for the use of different polypropylene resins with different flexural modulus in the foamed layers of the disclosed plastics laminate. Thus, claims 1-11, including dependent claim 7, are non-obvious over the disclosure of GB '435.

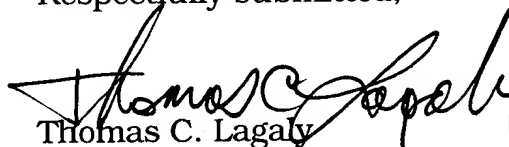
Claims 1-11 stand rejected under 35 USC §102(e) as being anticipated by or, in the alternative, under 35 USC §103(a) as obvious over Finkelstein (US 6,194,042). Finkelstein discloses a multi-layer closure liner that includes one or more foamed layers (paragraph bridging columns 2-3). Such foamed layers, described as "Layer A" at columns 7-8 and in the drawings, has an oxygen scavenger in its composition, and may be identified as a polyolefin, such as ethylene vinyl acetate, polypropylene, polyethylene, and their admixtures (col. 7, lines 14-56.) However, nowhere does Finkelstein teach or suggest that the foamed layers are formed from "two polypropylene resins having different flexural modulus" as recited in Applicants' claim 1. For example, the embodiment shown in FIG. 4 of Finkelstein, as described at col. 10, lines 9-18, includes two foam layers A₁" and A₂". Finkelstein does not disclose that the resins used to make these layers have different flexural modulus, or even that they are both formed from polypropylene. Instead, the only disclosed difference is that layer A₂" may include therein an oxygen scavenging agent.

Accordingly, none of the cited references teaches or suggests Applicants claimed thermoformable sheet comprising at least two separate foam polypropylene layers formed from two different resins having different flexural modulus. Such a combination has been found

to provide a desired balance between thermoformability and stiffness (see page 2 lines 5-7 and lines 16-19). This advantageous feature of the invention is similarly neither taught nor suggested in the cited references, taken alone or in combination. Therefore, Applicants respectfully submit that the references do not anticipate or establish a *prima facie* case of obviousness against claims 1-11.

For all of the foregoing reasons, Applicants submit that the claims as now presented are patentably distinct from the references of record and are, therefore, in condition for allowance. A Notice of Allowance is earnestly solicited.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claims 7 and 9 have been amended as follows:

7. (Twice amended) The thermoformable sheet of claim ~~1~~ 6 wherein the gas barrier layer is bonded to said foam polypropylene layers by means of tie layers of modified polyolefins.

9. (Amended) The thermoformable multi-layer sheet of claim 8 wherein the heat-sealing layer comprises a polymer selected from the group consisting of polyethylene homopolymers; heterogeneous or homogeneous ethylene-(C₄-C₈)-alpha-olefin copolymers having a density ≤ 0.915 g/cm³; blends thereof with minor amount of polyethylene homopolymers; ethylene-vinyl acetate copolymers, ethylene-acrylic or methacrylic acid copolymers including ionomers; heterogeneous or homogeneous ethylene-(C₄-C₈)-alpha-olefin copolymers having a density from about 0.915 g/cm³ to about 0.930 g/cm³; blends thereof with ethylene-vinyl acetate copolymers or ethylene-alkyl (meth)acrylate copolymers; ethylene-propylene-butene ter-polymers; and ethylene-alkyl acrylate-maleic anhydride ter-polymers; ~~and the like polymers.~~